

DRAFT

**ENVIRONMENTAL IMPACT
STATEMENT
FOR PROPOSED ESTABLISHMENT AND
MODIFICATION OF OREGON
MILITARY TRAINING AIRSPACE**

EXECUTIVE SUMMARY

OREGON AIR NATIONAL GUARD

**NATIONAL GUARD BUREAU
ASSET MANAGEMENT DIVISION**

JULY 2015

EXECUTIVE SUMMARY

The Oregon Air National Guard (ANG) has prepared this Draft Environmental Impact Statement (EIS) to evaluate the proposed establishment and modification of military training airspace over coastal, central, and eastern Oregon. The Proposed Action includes modifications to existing Air Traffic Control Assigned Airspaces (ATCAAs) and Military Operations Areas (MOAs) as well as the establishment of new MOAs and ATCAAs intended to provide properly configured and located military airspace supporting efficient, *realistic, mission-oriented training*. The need for the Proposed Action is driven by several factors including travel distance and time required to access existing training airspace areas as well as the frequency of weather conditions that limit the availability of coastal airspace areas for operational training. Expanded and newly established airspace areas would be utilized for military training exercises by the 142d Fighter Wing (142 FW) and the 173d Fighter Wing (173 FW) of the Oregon ANG based in Portland and Klamath Falls, respectively. The Oregon ANG is an integral part of the U.S. Air Force (USAF) under the Department of Defense's (DoD's) Total Force Policy, which includes the 142 FW and 173 FW of the Oregon ANG as well as the airspace areas that they utilize.¹

The 142 FW and the 173 FW operate F-15 Eagles, all-weather tactical fighter aircraft designed to gain and maintain air superiority in aerial combat. Recent improvements to the F-15's radar, along with other avionics upgrades and the growing reliance on stand-off Tactics, Techniques and Procedures (TTP) requires a larger airspace than currently exists in the airspace managed by both the 142 FW and 173 FW. The USAF Airspace Master Plan states that optimum airspace for low-altitude training (LOWAT) air-to-air training must be large enough to permit realistic offensive and defensive tactics (USAF 1992). If the area is too small, pilots can be distracted from mission training objectives by the need to constantly monitor their proximity to airspace boundaries (via displays showing boundaries, pilot-to-pilot communication, and pilot-to-ground communication), special use land management areas, and other restrictions to flight operations. In addition, a smaller airspace area concentrates noise, air

¹ Total Force Integration includes the sharing of resources between active duty, guard, and reserve units. This relationship often includes the sharing of equipment, aircraft, and infrastructure.

emissions, and other environmental effects of military overflights because it requires pilots to fly over the same area repeatedly. According to the USAF Airspace Master Plan, developing military training airspace should consider the primary tenets of Air Force Instruction (AFI) 13-201, *Airspace Management*, which is to achieve better efficiency through Volume, Proximity, Time, and Attributes (VPTA). Having training airspace that achieves these criteria is critical to accomplish realistic mission oriented training and better stewardship of resources.

- Volume. Volume is a key concept to understanding the amount of airspace actually required. The length and width of airspace are visible on a two-dimensional map, but the floor and ceiling must also be included to see the complete picture as airspace is always defined using three dimensions. This unique characteristic of airspace enables numerous users to operate safely at the same geographical location at the same time, but at different altitudes.
- Proximity. Airspace is often associated with a geographic area, airport, airfield, or military installation. Proximity affects the utility of the airspace and its use.
- Time. Airspace is allotted for use for a specific time period. Airspace designated for air-to-air training during a specific time may be subsequently used for air-to-ground gunnery when the next period begins.
- Attributes. Airspace attributes describe the physical characteristics or capabilities of the underlying surface that make certain sections of airspace unique. These attributes may be the type of terrain, instrumentation, chaff and flare approval, and target sets.

Proposed airspace improvements would include modifications to the existing Eel ATCAA, which occurs over portions of Clatsop, Tillamook, Yamhill, Polk, and Lincoln counties in coastal Oregon as well as a small inclusion above Pacific County in Washington. The expansion of the existing Juniper/Hart MOA Complex in eastern Oregon would overlies portions of Harney County in Oregon and Humboldt and Washoe counties in northwestern Nevada. The proposed

1 Redhawk MOA Complex would be located above portions of seven counties in
2 central Oregon including: Sherman, Gilliam, Morrow, Grant, Wheeler, Jefferson,
3 and Wasco counties (refer to Figure ES-1).

4 Details of the units' training missions and objectives and requirements driving
5 specific components of the Proposed Action are discussed below.

6 *Modifications to W-570 and Bass/Bass South ATCAAs*

7 Currently, there is a need to modify the configuration and vertical limits of
8 Warning Area (W)-570 and convert the Bass/Bass South ATCAAs into warning
9 areas to more effectively meet the training requirements of the 142 FW. The
10 advanced avionics and weapons systems in the current generation of the F-15
11 Eagle have made the vertical and lateral boundaries of W-570 constrained and
12 are insufficient to maximize pilot proficiency and experience to meet current
13 training requirements of the 142 FW and the advanced technological capabilities
14 of the F-15 aircraft.

15 *Eel MOA and Modification of the Eel ATCAA*

16 Frequently present weather conditions on the coast and sea-states that prohibit
17 over-water training represent a significant impact to training and foster the need
18 to establish a MOA beneath the existing Eel ATCAA to expand the vertical
19 confines of the existing airspace and facilitate required Basic Fighter Maneuvers
20 (BFM) and Air Combat Maneuvers (ACM) training. Current backup airspace
21 (i.e., the Juniper/Hart MOA Complex) is located far away (as far as 140 nautical
22 miles [NM]) and additional transit hours used flying to and from this airspace
23 waste fuel and flight hours available for training.

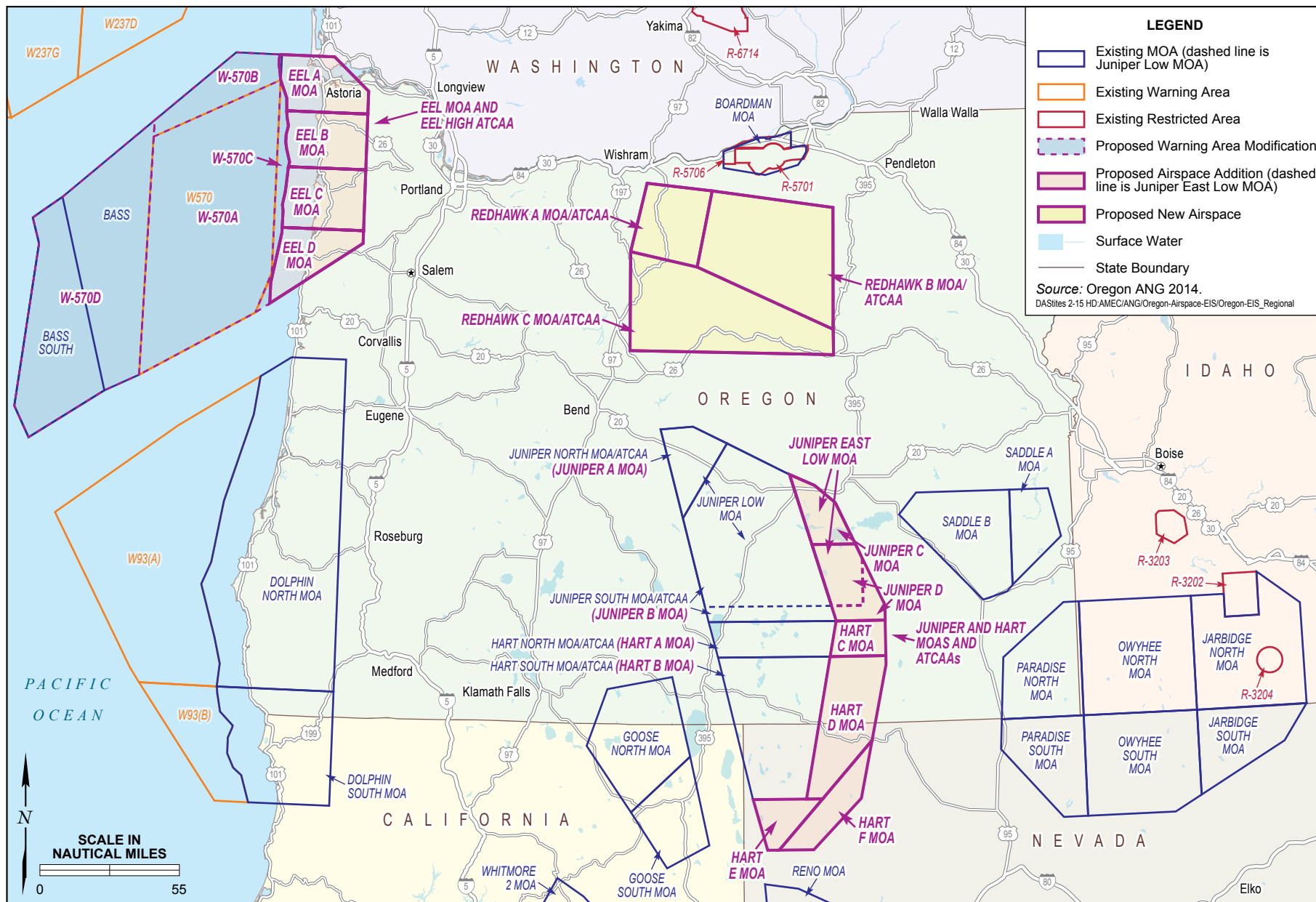
24 *Expansion of the Juniper/Hart MOA Complex*

25 The need for expansion of the Juniper/Hart MOA Complex to support 173 FW
26 requirements is driven by the fact that the airspace is currently too small to
27 efficiently accommodate realistic mission oriented training requirements and the



No warranty is made by the State/Territory/National Guard Bureau as to the accuracy, reliability, or completeness of these data for individual use or aggregate use with other data. This map is a "living document," in that it is intended to change as new data become available and are incorporated into the Enterprise GIS database.

ES-4



EIS

Regional Location Map
Proposed Airspace Establishment and Modification

FIGURE
ES-1

1 advanced technology within the F-15 aircraft. The proposed extension of the
2 Juniper/Hart MOA Complex would allow two simultaneous 4 v 4 Defensive
3 Counter-Air (DCA)/Offensive Counter-Air (OCA) training missions, three 2 v 2
4 scenarios, or four to five 1 v 1 scenarios, decreasing the overall time the airspace is
5 activated and used by and the 173 FW and allowing for more responsible
6 stewardship of the airspace by the Oregon ANG. Additionally, the expanded
7 airspace would be able to support existing Large Force Exercises (LFE), such as the
8 biannual Sentry Eagle Exercises, with upgraded avionics and weapons systems
9 and allow sufficient maneuvering to use threat emitters that are deployed for
10 training in the Juniper/Hart MOA Complex.

11 *Establishment of the Redhawk MOA Complex*

12 The proposed over-land Redhawk MOA Complex is needed by the 142 FW to
13 accomplish its mission. The proposed Redhawk MOA Complex would primarily
14 be scheduled and utilized by the 142 FW as a “weather contingency” airspace
15 when existing over-water airspace is unsuitable based upon weather conditions.
16 Over-water airspace is generally unusable 23 percent of the time, and up to 75
17 percent of the time, when storms over the Pacific Ocean extend into the coastal
18 airspace ranges, making them unusable for anything other than instrument
19 training. Airspace further inland and east of the Cascade Mountain range is
20 generally unaffected by these weather systems. However, the 173 FW is the
21 primary user of the existing Juniper/Hart MOA Complex, which creates
22 schedule conflicts and safety-of-flight hazards when this airspace is used by the
23 142 FW as a weather backup. Even when the Juniper/Hart MOA Complex is
24 available, the required distance and time flown to and from the complex is not
25 conducive to maximizing the efficiency and effectiveness of limited training time,
26 resulting in up to a 36-percent loss of critical training activities per sortie.
27 Further, although the proposed modification to the Eel ATCAA would provide
28 valuable over-land training airspace that the 142 FW needs, it would not support
29 all mission types for which the pilots need to train. Therefore, the 142 FW also
30 has a need for suitable over-land airspace that would allow its pilots to more
31 efficiently conduct realistic training operations. The proposed Redhawk MOA
32 Complex would be located much closer to Portland than the existing
33 Juniper/Hart MOA Complex, allowing 142 FW pilots to more efficiently conduct

the full suite of realistic training operations and to be prepared to fulfill their primary mission of homeland security.

Description of the Proposed Action and Alternatives

Proposed Action

Under the Proposed Action, the vertical limits and lateral configuration of W-570, Bass ATCAA, and Bass South ATCAA would be modified within their existing boundaries to meet training requirements of the 142 FW. As shown in Table ES-1, W-570 would be renamed as W-570A, a new segment to be named W-570C would be created adjacent to the eastern boundary of W-570A from 11,000 feet above Mean Sea Level [MSL], and Bass ATCAA and Bass South ATCAA would be converted and reconfigured to W-570B and W-570D and the floor of these segments would be lowered from Flight Level (FL) 180 (18,000 feet MSL) to 1,000 feet MSL. The ceilings of W-570A as well the existing Bass South ATCAA (to be renamed W-570C and portion of W-570D) would remain at FL 500 (50,000 feet MSL) while the ceiling of the existing Bass South ATCAA (remaining portion to be renamed W-570D) would be raised from FL 270 (27,000 feet MSL) to FL 500 (50,000 feet MSL). The proposed modification of the W-570 and Bass/Bass South ATCAA Complex would not result in an increase in total annual flight hour or sortie authorizations for the 142 FW. However, implementation of the Proposed Action would result in an increase of approximately 253 hours annually within the airspace. This increase would be due in part to the fact that the expanded vertical limits of the airspace would accommodate additional training operations that cannot currently be supported. The increase in training time spent within the airspace complex would be offset by a reduction in overall transit time as the establishment of the proposed Eel MOA Complex and Redhawk MOA Complex would reduce the number of flying hours currently spent by the 142 FW transiting to and from existing weather backup and over-land training airspace (i.e., the Juniper/Hart MOA Complex).

Table ES-1. Existing and Proposed Airspace Usage, W-570 and Bass/Bass South ATCAA Modifications

Existing		Proposed Action	
Airspace	Annual Usage	Airspace	Annual Usage
W-570 (surface to FL 500)	900 hrs 1,800 ops	W-570 A (surface to FL 500)	900 hrs 1,800 ops
Bass ATCAA (FL 180 to FL 500)	42 hrs 250 ops	W-570 B (1,000 MSL to FL 500)	100 hrs 600 ops
Bass South ATCAA (FL 180 to FL 270)	17 hrs 100 ops	W-570 D (1,000 MSL to FL 500)	142 hrs 700 ops
N/A (new proposed airspace)	N/A	W-570 C (11,000 MSL to FL 500)	70 hrs 550 ops

Source: Oregon ANG 2013a, 2013b.

Under the Proposed Action, the western portion of the existing Eel ATCAA would be converted into W-570C and the vertical limits would be expanded to include airspace from 11,000 feet MSL to FL 500 (50,000 feet MSL). The proposed Eel MOAs would be established directly underneath the resulting configuration of Eel ATCAA from 11,000 feet MSL up to but not including FL 180 (18,000 feet MSL). In addition, the proposed Eel High ATCAAs would be established directly above the existing Eel ATCAA from FL 270 (27,000 feet MSL) to FL 500 (50,000 feet MSL). Finally, the Eel MOA/ATCAA Complex would be divided into four segments (A, B, C, and D). Table ES-2 summarizes the proposed changes. The proposed establishment and modifications to the Eel MOA/ATCAA Complex would not result in an increase in total annual flight hour or sortie authorizations for the 142 FW; however, training operations within the Eel MOA/ATCAA would represent an increase over those currently occurring within the existing Eel ATCAA largely because the expanded vertical limits of the airspace would accommodate additional training operations that cannot currently be supported in the Eel ATCAA as currently configured. This increase in training hours would be offset by an overall reduction in transit hours flying to and from weather backup and over-land training airspace, as the proposed Eel MOA Complex and Redhawk MOA Complex would be located closer than the existing Juniper/Hart MOA Complex. The Eel MOA/ATCAA Complex would see an increase of activity of approximately 305 hours annually over existing conditions.

1 **Table ES-2. Existing and Proposed Airspace Usage, Eel ATCAA**
2 **Modifications**

Existing		Proposed Action	
Airspace	Annual Usage	Airspace	Annual Usage
N/A (new proposed airspace)	N/A	Eel MOA A (11,000 MSL to FL 180)	60 hrs 180 ops
		Eel MOA B (11,000 MSL to FL 180)	90 hrs 270 ops
		Eel MOA C (11,000 MSL to FL 180)	90 hrs 270 ops
		Eel MOA D (11,000 MSL to FL 180)	60 hrs 180 ops
Eel ATCAA (FL 180 to FL 270)	333 hrs 4,000 ops	Eel ATCAA A (FL 180 to FL 270)	60 hrs 720 ops
		Eel ATCAA B (FL 180 to FL 270)	90 hrs 1,080 ops
		Eel ATCAA C (FL 180 to FL 270)	90 hrs 1,080 ops
		Eel ATCAA D (FL 180 to FL 270)	60 hrs 720 ops
N/A (new proposed airspace)	N/A	Eel High ATCAA A (FL 270 to FL 500)	7.6 hrs 90 ops
		Eel High ATCAA B (FL 270 to FL 500)	11.4 hrs 135 ops
		Eel High ATCAA C (FL 270 to FL 500)	11.4 hrs 135 ops
		Eel High ATCAA D (FL 270 to FL 500)	7.6 hrs 90 ops

3 Source: Oregon ANG 2013a, 2013b.

4 Under the Proposed Action, the eastern boundary of the existing Juniper/Hart
5 MOA Complex would be extended approximately 20 miles to the east and the
6 southern boundary would be extended approximately 25 miles to the south.
7 Once established, the existing and proposed airspace segments would be
8 renamed alphabetically to include Juniper A through D MOAs and Hart A
9 through F MOAs. As with the existing Juniper and Hart MOAs, the proposed
10 new MOAs to the east would be located from an elevation of 11,000 feet MSL to
11 but not including FL 180 (18,000 feet MSL). Expansion of the existing Juniper
12 Low MOA would include the proposed Juniper East Low MOA, which would be

located directly underneath the proposed Juniper C MOA and a majority of the proposed Juniper D MOA. The proposed Juniper East Low MOA would be established from 500 feet AGL to but not including 11,000 feet MSL. In addition, the Proposed Action would include raising the floor of the existing Juniper Low MOA from 300 feet AGL to 500 feet AGL. Table ES-3 illustrates proposed changes to the Juniper/Hart MOA Complex. Implementation of the Proposed Action would not result in any changes to overall usage of the Juniper/Hart MOA Complex by the 173 FW. Use of the Juniper/Hart MOA Complex by 142 FW aircraft would decrease given the proposed establishment and modification of other airspace complexes included under the Proposed Action that would provide the 142 FW with closer, more consistently usable airspace.

Under the Proposed Action, a new over-land MOA complex would be established approximately 100 miles east-southeast of Portland in central Oregon, roughly bound by Highway 97/197 on the west, the towns of Wasco and Lexington on the north, U.S. Highway 395 on the east, and U.S. Highway 26 on the south. The proposed Redhawk MOAs (A, B, and C) would be established from 11,000 feet MSL to but not including FL 180 (18,000 feet MSL). In addition, associated ATCAAs would be established directly above the proposed Redhawk MOAs from FL 180 (18,000 feet MSL) to FL 510 (51,000 feet MSL). Total usage of the Redhawk MOA Complex is anticipated to be approximately 500 flight hours per year. Table ES-4 illustrates the configuration and usage of the proposed Redhawk MOA Complex. The proposed Redhawk MOA Complex would primarily be scheduled and utilized by the 142 FW, reducing scheduling and flight safety burdens on the Juniper/Hart MOA Complex. The proposed MOA complex would also provide the 142 FW with more consistently usable airspace which located much closer to the unit's home installation than the Juniper/Hart MOA Complex, reducing the overall flight hours spent in transit.

Alternatives

In addition to the Proposed Action, three alternatives were considered. Identified alternatives, which would include pursuing a subset of the proposed airspace modifications, are described below.

1 **Table ES-3. Existing and Proposed Airspace Usage, Juniper/Hart MOA Complex**

Baseline				Proposed Action			
Airspace	Annual Usage			Airspace	Annual Usage		
	142 FW	173 FW	Total		142 FW	173 FW	Total
Juniper Low MOA (300 AGL to 11,000 MSL)	100 hrs 600 ops	143 hrs 660 ops	243 hrs 1,260 ops	Juniper Low MOA (500 AGL to 11,000 MSL)	90 hrs 540 ops	114 hrs 660 ops	204 hrs 1,200 ops
Juniper North MOA (11,000 MSL to FL 180)	250 hrs 600 ops	36 hrs 519 ops	286 hrs 1,119 ops	Juniper A MOA (11,000 MSL to FL 180)	167 hrs 400 ops	21 hrs 519 ops	188 hrs 919 ops
Juniper South MOA (11,000 MSL to FL 180)	625 hrs 1,500 ops	653 hrs 3,255 ops	1,278 hrs 4,755 ops	Juniper B MOA (11,000 MSL to FL 180)	125 hrs 500 ops	499 hrs 3,255 ops	624 hrs 3,755 ops
Hart North MOA (11,000 MSL to FL 180)	84 hrs 500 ops	121 hrs 2,311 ops	205 hrs 2,811 ops	Hart A MOA (11,000 MSL to FL 180)	67 hrs 400 ops	121 hrs 2,311 ops	188 hrs 2,711 ops
Hart South MOA (11,000 MSL to FL 180)	17 hrs 200 ops	348 hrs 1,840 ops	365 hrs 2,040 ops	Hart B MOA (11,000 MSL to FL 180)	12.5 hrs 150 ops	269 hrs 1,840 ops	281.5 hrs 1,990 ops
N/A (new airspace)	--	--	--	Juniper East Low MOA (500 AGL to 11,000 MSL)	10 hrs 60 ops	35 hrs 425 ops	45 hrs 485 ops
N/A (new airspace)	--	--	--	Juniper C MOA (11,000 MSL to FL 180)	19 hrs 114 ops	37 hrs 1,085 ops	56 hrs 1,199 ops
N/A (new airspace)	--	--	--	Juniper D MOA (11,000 MSL to FL 180)	14 hrs 86 ops	44 hrs 1,085 ops	58 hrs 1,171 ops
N/A (new airspace)	--	--	--	Hart C MOA (11,000 MSL to FL 180)	3.5 hrs 40 ops	55 hrs 1,085 ops	58.5 hrs 1,125 ops
N/A (new airspace)	--	--	--	Hart D MOA (11,000 MSL to FL 180)	1 hr 10 ops	55 hrs 1,085 ops	56 hrs 1,095 ops
N/A (new airspace)	--	--	--	Hart E MOA (11,000 MSL to FL 180)	0 0 ops	32 hrs 708 ops	32 hrs 708 ops
N/A (new airspace)	--	--	--	Hart F MOA (11,000 MSL to FL 180)	0 0 ops	18 hrs 708 ops	18 hrs 708 ops
Juniper ATCAA (FL 180 to FL 510)	167 hrs 2,000 ops	833 hrs 2,500 ops	1,000 hrs 4,500 ops	Juniper ATCAA (FL 180 to FL 510)	167 hrs 2,000 ops	833 hrs 2,500 ops	1,000 hrs 4,500 ops

1 **Table ES-3. Existing and Proposed Airspace Usage, Juniper/Hart MOA Complex (Continued)**

Baseline				Proposed Action			
Airspace	Annual Usage			Airspace	Annual Usage		
	142 FW	173 FW	Total		142 FW	173 FW	Total
Hart ATCAA (FL 180 to FL 510)	67 hrs 800 ops	300 hrs 1,200 ops	367 hrs 2,000 ops	Hart ATCAAs A-E (FL 180 to FL 510)	60 hrs 720 ops	270 hrs 1,080 ops	330 hrs 1,800 ops
N/A (new airspace)	--	--	--	Hart ATCAA F (FL 180 to FL 280)	7 hrs 80 ops	30 hrs 120 ops	37 hrs 200 ops

2 Source: Oregon ANG 2013a, 2013b, 2014.

1 **Table ES-4. Proposed Airspace Usage, Redhawk MOAs and ATCAAs**

Airspace	Annual Operations-142 FW (duration)
Redhawk MOA A (11,000 MSL to FL 180)	33 hrs 100 ops
Redhawk MOA B (11,000 MSL to FL 180)	167 hrs 500 ops
Redhawk MOA C (11,000 MSL to FL 180)	167 hrs 500 ops
Redhawk ATCAA A (FL 180 to FL 510)	12 hrs 72 ops
Redhawk ATCAA B (FL 180 to FL 510)	60.5 hrs 364 ops
Redhawk ATCAA C (FL 180 to FL 510)	60.5 hrs 364 ops

2 Source: Oregon ANG 2013a, 2013b.

3 **Alternative B.** Under this alternative, the proposed Eel MOAs and Eel High
4 ATCAA would not be established. Under the Proposed Action, the existing Eel
5 ATCAA and proposed Eel MOAs would provide sufficient over-land airspace to
6 conduct visual range BFM training, but these airspace areas would be too small
7 to conduct Beyond Visual Range (BVR) tactical intercept training. The proposed
8 Redhawk MOA Complex would be utilized for these types of tactical intercept
9 training missions. However, under this alternative over-land tactical intercept
10 training (i.e., BFM) intended for the proposed Eel MOAs would also be moved to
11 the proposed Redhawk MOA Complex. As a result, this alternative would
12 provide a slightly reduced benefit relative to the Proposed Action given that
13 sorties that would have been intended for the proposed Eel MOAs would have to
14 transit a slightly greater distance to the proposed Redhawk MOA Complex,
15 resulting in additional transit time and reduced training time.

16 **Alternative C.** This alternative would include the same airspace changes as
17 described under the Proposed Action; however, the Redhawk MOA Complex
18 would not be established. Under the Proposed Action, the proximity of the
19 proposed Redhawk MOA Complex to Portland would substantially increase
20 flying hours available for training. Under this alternative, pilots scheduled for
21 sorties affected by weather conditions would continue to be forced to travel to
22 the Juniper/Hart MOA Complex, which increases transit time and reduces

1 training efficiency relative to the Proposed Action. Consequently,
2 implementation of Alternative C would result in reduced benefits to Oregon
3 ANG mission readiness as 70 percent of training operations intended for the
4 Redhawk MOA Complex would instead have to transit roughly 139 percent
5 farther in order to reach the Juniper/Hart MOA Complex. This would result in a
6 substantial increase in transit time relative to the Proposed Action and a
7 corresponding decrease in training time spent within usable airspace.

8 **Alternative D.** This alternative would include the same airspace changes as
9 described under the Proposed Action; however, the Juniper/Hart MOA
10 Complex would not be modified. While the 142 FW would utilize other training
11 airspace under this scenario, as modified or established by the Proposed Action
12 (e.g., Redhawk MOA Complex), the 173 FW would continue to operate within
13 the existing airspace, which is currently too small to efficiently accommodate
14 training operations needed to maintain proficiency of pilots operating the unit's
15 currently assigned aircraft. Consequently, this alternative would result in
16 continued impacts to training efficiency and safety conditions, resulting in
17 negative impacts to Oregon ANG mission readiness and ultimately weakening
18 homeland defense and USAF readiness.

19 In addition to these three project alternatives, a No-Action Alternative was also
20 considered. If the No-Action Alternative is selected, the Oregon ANG would not
21 implement the Proposed Action and would continue operating within the
22 existing airspace, including W-570, Bass and Bass South ATCAAs, Eel ATCAA,
23 and the existing Juniper/Hart MOA Complex. The current airspace constraints
24 would continue to degrade the Oregon ANG's ability to efficiently conduct
25 realistic training to ensure the required mission readiness and syllabus execution
26 of the 142 FW and 173 FW, respectively. The travel distance and time currently
27 required to access existing training airspaces, coupled with the frequency of
28 weather conditions that limit the availability of coastal airspace areas for training
29 operations, would continue to result in a loss of training for assigned pilots
30 (approximately 300 hours per year). Further, transit by 142 FW pilots to the
31 Juniper/Hart MOA Complex would result in increased fuel usage and
32 maintenance relative to the Proposed Action. Further, the existing airspaces
33 would have to be activated for a longer period of time to relative to scenarios
34 under the Proposed Action, rendering them unavailable to other users at greater

frequency and for longer durations. This alternative is carried forward for analysis in the EIS in accordance with Council on Environmental Quality (CEQ) regulation 40 Code of Federal Regulations (CFR) 1502.14(d).

Lead and Cooperating Agencies

The National Guard Bureau (NGB) is the lead agency for this Draft EIS pursuant to 40 CFR §1501.5 and §1508.5. Since the Proposed Action includes activities associated with special use airspace (SUA), the NGB requested the Federal Aviation Administration's (FAA's) cooperation (15 August 2012) in accordance with the guidelines described in the Memorandum of Understanding (MOU) between the FAA and the DoD Concerning SUA Environmental Actions, dated 4 October 2005. As a cooperating agency, the FAA was requested to participate in various portions of the EIS development, including:

- Participating in the scoping process;
- Assuming responsibility, upon request by the Air Force, for developing information and preparing analyses on issues for which you have special expertise; and
- Making staff support available to enhance interdisciplinary review capability.

This Draft EIS was prepared in compliance with NEPA (42 U.S. Code [USC] §4321 et seq.), CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR §1500-1508), EIAP as promulgated at 32 CFR §989, and FAA Order 1050.1E, Change 1 (2006).

Consistency of EIS with FAA Order 1050.1E, Change 1

Table ES-5 lists each of the impact categories identified in FAA Order 1050.1E, Change 1 (2006) and the corresponding chapter in the Draft EIS. This Draft EIS provides a detailed analysis of the potential environmental effects associated with the changes to military training airspace in Oregon, including modifications to existing ATCAAs and MOAs, and establishment of new MOAs and ATCAAs on 14 of the 18 potential impact categories identified in FAA Order 1050.1E,

1 Change 1 (2006). The Proposed Action would have no impact on the remaining
2 four categories identified in FAA Order 1050.1E, Change 1 (2006), which were
3 eliminated from further analysis (see Table ES-5 for a resource-specific rationale
4 for excluding these resource areas from further analysis).

5 **Environmental Consequences of the Proposed Action and Alternatives**

6 The Proposed Action would have no impacts or negligible adverse impacts on
7 the following 15 categories: coastal resources; compatible land use; construction
8 impacts; Department of Transportation Act: Section 4(f); farmlands; floodplains;
9 hazardous materials, pollution prevention, and solid waste; historical,
10 architectural, archaeological, and cultural resources; light emissions and visual
11 impacts; natural resources and energy supply; socioeconomic impacts,
12 environmental justice and children's environmental health and safety risks;
13 secondary impacts; water quality; wetlands; and wild and scenic rivers. The
14 Proposed Action would also have less than significant adverse impacts on air
15 quality; fish, wildlife and plants; noise; and airspace management as summarized
16 below and described in detail in Sections 3 and 4 of the Draft EIS. These effects
17 are similarly summarized below and described in detail in Sections 3 and 4 of the
18 Draft EIS.

19 **Air Quality.** The Proposed Action does not include any changes to the existing
20 inventories of F-15 aircraft at the 142 FW and 173 FW and implementation would
21 not result in any increases to total annual flight hour or sortie authorizations for
22 either unit. Therefore, overall aircraft operational emissions would not be
23 expected to change substantially. However, aircraft emissions from the 142 FW
24 and 173 FW are expected to be redistributed within the vertical limits and lateral
25 configurations of the proposed airspace areas.

26 Expanded or newly established airspace in Polk County, OR and Washoe
27 County, NV would be located in *nonattainment* or *maintenance* areas. However,
28 the proposed airspace above these counties would be established at 11,000 feet
29 MSL under the Proposed Action (approximately 6,000 feet AGL). The FAA
30 conducted a study of ground level concentrations caused by elevated aircraft

1 **Table ES-5. FAA Order 1050.1E, Change 1, Environmental Resources to be**
2 **Considered in an EA or EIS**

Resource	Location in the EIS
Air Quality	Sections 3.6 and 4.6, <i>Air Quality</i>
Coastal Resources	Sections 3.4 and 4.4, <i>Biological Resources</i>
Compatible Land Use	Sections 3.3 and 4.3, <i>Land Use and Visual Resources</i>
Construction Impacts	No construction activities would occur under the Proposed Action; therefore, this resource was eliminated from further consideration.
Department of Transportation Act: Section 4(f)	Sections 3.3 and 4.3, <i>Land Use and Visual Resources</i> . Per FAA Order 1050.1E, Change 1, Section 6 the Draft EIS does not provide a Section 4(f) analysis. Paragraph 6.1c describes that designation of airspace for military flight operations is exempt from section 4(f) of the Department of Transportation Act. The Department of Defense reauthorization in 1997 provided that “[n]o military flight operations (including a military training flight), or designation of airspace for such an operation, may be treated as a transportation program or project for purposes of Section 303(c) of Title 49, USC (Public Law [PL] 105-85).
Farmlands	Sections 3.3 and 4.3, <i>Land Use and Visual Resources</i>
Fish, Wildlife, and Plants	Sections 3.4 and 4.4, <i>Biological Resources</i>
Floodplains	No construction activities or other ground-based activities would occur under the Proposed Action and its implementation would not cause any disturbance of floodplains; therefore, this resource was eliminated from further consideration. Refer to Section 3.10.
Hazardous Materials, Pollution Prevention, and Solid Waste	Sections 3.8 and 4.8, <i>Hazardous Materials and Wastes</i>
Historical, Architectural, Archeological, and Cultural Resources	Sections 3.5 and 4.5, <i>Cultural Resources</i>
Light Emissions and Visual Impacts	Sections 3.3 and 4.3, <i>Land Use and Visual Resources</i>
Natural Resources and Energy Supply	The Proposed Action would not involve extractive activities or changes in the energy supply; therefore, this resource was eliminated from further consideration.
Noise	Sections 3.2 and 4.2, <i>Noise</i>
Socioeconomic Impacts, Environmental Justice and Children’s Environmental Health and Safety Risks	Sections 3.9 and 4.9, <i>Socioeconomics, Environmental Justice, and Children’s Health and Safety</i>
Secondary (Induced) Impacts	Secondary impacts are addressed by resource area within Section 4, <i>Environmental Consequences</i> .

Table ES-5. FAA Order 1050.1E, Change 1, Environmental Resources to be Considered in an EA or EIS (Continued)

Resource	Location in the EIS
Water Quality	No construction activities or other ground-based activities would occur under the Proposed Action and its implementation would not cause any disturbance of surface water or groundwater resources; therefore, this resource was eliminated from further consideration. Refer to Section 3.10, <i>Dismissed Resource Areas</i> . Potential impacts to water quality as a result of chaff and flare have been addressed in 3.8 and 4.8, <i>Hazardous Materials and Wastes</i> .
Wetlands	Sections 3.4 and 4.4, <i>Biological Resources</i>
Wild and Scenic Rivers	Sections 3.3 and 4.3, <i>Land Use and Visual Resources</i>

Source: FAA 2006.

emissions released AGL using U.S. **Environmental** Protection Agency (USEPA)-approved models and conservative assumptions. The study concluded that aircraft operations at or above the average mixing height of 3,000 feet AGL have a very small effect on ground level concentrations and could not directly result in a violation of the Nation Ambient Air Quality Standards (NAAQS) in a local area. Therefore, while total training hours would increase under the Proposed Action, the overall aircraft operational emissions would not be expected to affect ground level concentrations of pollutants. Further, these emissions would be dispersed over a larger area. All other proposed airspace areas would be established over counties that are in *attainment* for all criteria pollutants. Consequently, a General Conformity Determination would not be required for the Proposed Action (see Appendix F, *Air Quality*).

Biological Resources. The Proposed Action would not result in any construction or ground-disturbing activities. However, direct impacts would include potential for bird-aircraft collisions within the air column during transit or training operations. Additionally, secondary effects would include minor noise impacts to sensitive wildlife species as well as indirect impacts to sensitive biological resources, including sensitive habitats. However, direct overflights, resulting in maximum noise exposure, would be rare due to the distribution of flight activity throughout the proposed airspace areas. Further, the average noise would not exceed the FAA Order 1050.1E, Change 1 (2006) threshold of 65 DNL, and would not approach 55 DNL, which is considered by the USEPA as loud in residential areas and farms and other outdoor areas.

1 **Noise.** The military training operations conducted within the proposed airspace
2 areas would not surpass FAA thresholds as they would not result in an increase
3 of 1.5 dB or more at or above 65 DNL. Further, noise levels beneath the proposed
4 affected airspaces would not approach 55 DNL, which is considered by the
5 USEPA as loud in residential areas and farms and other outdoor areas where
6 people spend widely varying amounts of time and other places in which quiet is
7 a basis for use (USEPA 1974). Additionally, there would be an overall decrease in
8 Onset Rate-Adjusted Monthly Day-Night Average (L_{dnmr}) noise levels beneath
9 the existing MOAs based on a broader geographic distribution of aircraft training
10 operations and raising of the airspace floor in some areas (e.g., Juniper Low
11 MOA). Therefore, implementation of the Proposed Action would not result in a
12 significant impact to noise beneath the proposed airspace.

13 As a result of the Proposed Action, short-term exposure to noise generated by
14 military flight operation would increase as military aircraft activity would be
15 introduced within the proposed airspace areas, including W-570, Eel MOAs,
16 Juniper/Hart expansion area, and Redhawk MOA Complex; however, the
17 average number of daily short-term events above 65 dB sound exposure level
18 (SEL) would remain the same or decrease within the existing airspaces as
19 military operations would be spread throughout the existing and proposed
20 airspaces following implementation of the Proposed Action. Short-term exposure
21 would vary between and within MOAs but would not generally present a
22 substantial adverse impact. (See Appendix E, *Noise*, for additional information
23 regarding noise metrics.)

24 **Airspace Management.** Implementation of the Proposed Action would result in
25 the redistribution of flight training operations within existing and proposed
26 Oregon ANG SUA (i.e., warning areas, MOAs, and ATCAAs) located over
27 northwestern and south-central Oregon. Proposed airspace modifications and
28 establishments were specifically developed to account for computer modeling of
29 actual aircraft flight path histories in the region, in order to identify the most
30 ideal locations and configurations for the proposed airspace with the least
31 potential impact on surrounding military, commercial, and general aviation.
32 Further, all proposed new Oregon ANG airspace segments would only be
33 activated on an as-needed basis – as a whole or individually – allowing for more
34 responsible stewardship of the airspace regionally and helping to minimize

- 1 conflicts with other users and reducing the overall amount of time an airspace
2 area would be activated.
- 3 Implementation of the Proposed Action is not expected to compromise or require
4 changes to existing Air Traffic Control (ATC) systems, facilities, or procedures.
5 Therefore, the Proposed Action is not expected to significantly impact airspace
6 management or increase the likelihood of mid-air collisions with civilian aircraft.

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